Docket No. D0932-00428 [VS-8855]

### III. Remarks

#### A. Examiner Interview

The undersigned is grateful to the Examiner for her courtesy extended in the telephone interview of July 31, 2006, during which the §112 rejection and anticipation rejection were discussed, as detailed below.

# B. Rejection under 35 U.S.C. §112

The Action rejects Claims 1, 5, 7, 10, 16, 17, 26 and 27 as failing to comply with the enablement requirement, §112, ¶1. The Examiner states that it cannot be determined how "flush" the "substantially flush" member must be to fall within the metes and bounds of the claim, etc.

Claims 1, 9, 17 and 25 have been amended to change the recitation of "generally rectangular" to "rectangular." Applicant submits that the term "rectangular" siding panel encompasses siding panels that have a precise or slightly imprecise rectangle shape.

Dependent claims 5, 10 and 28 have been amended to recite "extends along the entire length of said rear face" rather than "extends substantially along the entire length of said rear face."

With respect to the "substantially flush" feature recited in Claims 1, 7, 9, 17, 25, 26 and 27 and the "substantially matches" feature of Claim 16, the Examiner requested in the telephone interview that the undersigned re-present arguments directed to these features. Reconsideration of the §112 rejection is respectfully requested in view of the following arguments.

Applicant questions whether the Examiner intended to reject these claims as being indefinite under 35 U.S.C. §112, ¶2 as opposed to lack of enablement of §112, ¶1. An indefiniteness rejection is the more expected §112 rejection to relative terminology such as

Docket No. D0932-00428 [VS-8855]

"about" or "substantially." Regardless, the following arguments apply equally to a rejection under either ¶1 or ¶2 of §112.

The MPEP clearly states that there is nothing inherently wrong with using relative terminology and its use is a "standard tool[] in claim drafting." MPEP 2173.05(b) The MPEP provides that the acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed, in light of the specification. <u>Id</u>.

As explained in the "Background of the Invention" section of the present application, the gap formed between the rear surface of a siding panel and the wall in an overlapping clapboard assembly permits the fasteners that are driven through the panel to apply a bending stress to the panel, which can lead to cracking. The nails entering this gap between the panel and the wall also tend to create puncture fractures, much like a bullet exiting an object into open space. Cracking and puncture marks can lead to water penetration, weakening the holding strength of the fasteners and the expected life of the product.

Turning to Claim 1, Claim 1 recites that "at least a portion of said [first] area [proximate to a top end of said rear face] sits <u>substantially flush</u> with a portion of a vertical wall." The specification describes embodiments where the first area is shaped so that a substantially flush fit can be made between the wall and this first area. By way of example, the specification describes the desired combined angle " $\alpha$ " plus " $\beta$ " (see, e.g., FIG 4) is at or around 180°. (¶0014) One of ordinary skill will understand that the angle  $\beta$  is determined by the overlap of the underlying siding panel and angle  $\alpha$  can be selected to get a substantially flush engagement, i.e., at or around 180° combination of  $\alpha+\beta$ . As described in the specification, the desired result of the engagement is to reduce or eliminate nail punctures and cracking and to provide a secure nailing face that does not subject the panel to, or that reduces, bending stresses. (¶¶0016; 0020)

From this guidance, it is respectfully submitted that one of ordinary skill would understand what is claimed in Claim 1 in light of the specification in compliance with §112, ¶1

Docket No. D0932-00428 [VS-8855]

and that the claimed siding panel is enabled in compliance with §112, ¶2. These arguments also apply to Claims 7, 9, 17, 25 and 27, which also recite a "substantially flush" feature.

Claim 16 depends from Claim 9 and recites that "wherein said reinforced area includes a planar face that contacts said portion of said vertical wall, said planar face extending from a top edge of said first siding panel at an angle that substantially matches an angle between said rear face of said first panel and said wall created by said overlap." Claim 16 recites, albeit in a different way than Claim 1, a manner in which a substantially flush engagement can be achieved between the overlapping siding panel and the wall. For reasons analogous to those argued above in connection with Claim 1, it is submitted that one of ordinary skill would understand what is claimed in Claim 16 in light of the specification in compliance with §112, ¶1 and that the claimed siding panel is enabled in compliance with §112, ¶2.

In view of the foregoing, reconsideration and withdrawal of the rejection of Claim 1, 5, 7, 10, 16, 17, 26 and 27 are respectfully requested. Affirmation of the allowability of Claims 5, 9-16, and 25-26 is also respectfully requested.

## C. Rejection under 35 U.S.C. §102

The Action rejects Claims 1, 4, 6, 17-19, 21, 27-28 as been anticipated by U.S. Patent No. 4,334,396 to Hagopian. In the interview with the Examiner, the undersigned and the Examiner discussed the "with said rear face including a portion proximate to a bottom end of said rear face resting upon a front face of said second siding panel" feature recited in independent Claims 1 and 17. The Applicant agreed to re-present these arguments for consideration by the Examiner. Independent Claim 27 is discussed separately.

### 1. Independent Claims 1 and 17

Hagopian discloses a metal siding panel 10 having preformed nail slots 22. The panel 10 is shaped to interlock, as opposed to passively overlap, with other similarly shaped siding panels using gripping portion 18 and flange 28, which form a male/female interconnection.

Docket No. D0932-00428 [VS-8855]

Claims 1 and 17 recite that not only does the rear face have a first area proximate to a top end of said rear face shaped such that at least a portion of said area sits substantially flush with a portion of a vertical wall when said siding panel is secured to said vertical wall and angled to overlap at least a portion of a second siding panel secured to said vertical wall, but the rear face also includes a portion proximate to a bottom end of said rear face resting upon a front face of said second siding panel when the panel is angled to form the overlap. This feature clarifies the type of siding panel being claimed, i.e., a siding panel that forms a passive overlap with a lower siding panel as shown in FIGS. 5 and 7, for example, as opposed to an interlocking fit with an overlapped siding panel.

With respect to this feature, the Examiner concludes that the rear face (R) has a portion (48) that rests upon the front face (FF,14) of the second siding panel. (Action, Page 3). As discussed in the Examiner interview, the focus must be on the front and rear faces of the siding panels. Turning to FIG. 3 of Hagopian, the front face of the overlapping, top siding panel is identified by reference 14. An exhibit including a copy of FIG. 3 of Hagopian where the front face is traced in a heavy black line is submitted for the Examiner's review. Like the claimed siding panel, the siding panel of Hagopian has a front face and a rear face. If the front face of this siding panel 10 is traced as shown in the Exhibit, the front face of siding panel 10 is clearly the face that actually rests on the front face of the overlapped siding panel, not the rear face as claimed in Claims 1 and 17. No portion of the rear face of the panel 10 of Hagopian is shaped to "rest" on the front face of an overlapped panel.

For at least these reasons, it is submitted that Claims 1 and 17 are not anticipated by and are allowable over Hagopian and the other the art of record. It is also submitted that Claims 2-8 and 18-24, which depend from Claims 1 and 17, respectfully, are also allowable over the art of record.

It is also submitted that dependent Claims 19 and 21 are independently allowable over Hagopian. Both Claims 19 and 21 recite the step of driving a series of nails or fasteners through

10

Docket No. D0932-00428 [VS-8855]

a siding panel. This step does not occur in the installation method of Hagopian, as the panel 10 of Hagopian is provided with preformed nailing apertures 22. With preformed nailing apertures 22, fasteners need not be driven through the siding panel.

## 2. Independent Claim 27

Claim 27 has been amended in the previous Response to recite that the siding panel is a "clapboard" siding panel. A "clapboard" siding panel is generally understood in the art to mean one of a series of long planks of wood or other material, such as a polymer or fiber cement, with edges horizontally overlapping, for covering the outer walls of buildings. Often, the bottom, overlapping edge is thicker than the top, overlapped edge.

It is submitted that the Examiner has conceded in the rejection of Claims 2, 3, 22 and 23 that Hagopian does not teach or suggest a clapboard siding panel. Therefore, it is submitted that Claim 27 is not anticipated by Hagopian as set forth in the Action. Accordingly, withdrawal of this rejection is respectfully requested.

Still further, a metal siding panel such as panel 10 of Hagopian that is bent to form interlocking members 18 and 28 would not be understood by those in the art to be a clapboard siding panel. In rejecting Claims 2, 3, 22 and 23, the Examiner relies on the combination of Hagopian and U.S. Patent No. 6,065,260 to Dickey, specifically to Col. 3, Lines 24-28 thereof, for providing this feature, noting that Dickey teaches that it is known in the art to form a siding member 10 out of wood clapboard. With respect to those claims, the Examiner concludes that it would have been obvious to form the siding member of Hagopian "out of wood clapboard material." Applicant respectfully disagrees.

Dickey discloses a siding panel 10 that is formed of polyvinylchloride (PVC) and that, like Hagopian, is shaped to having interlocking member 18 and 24. (See FIGS. 3 and 4). The panel 10 of Dickey, therefore, like the panel 10 of Hagopian is not a clapboard siding panel as understood in the art. Rather, the interlock mechanism of Dickey merely provides a "clapboard"

Docket No. D0932-00428 [VS-8855]

presentation." (Col. 3, Line 25) Providing a "clapboard presentation" does not make the panel a "clapboard panel" as recited in the Claim 27 (just like the simulated wood grain finish of the Dickey panel does not make it a wood panel).

Further, it is highly unlikely that one of ordinary skill could make the siding panel 10 of either Hagopian or Dickey from conventional clapboard materials, such as wood or fiber cement, as suggested by the Examiner. It is relatively simple to produce the shapes of Hagopian and Dickey from a PVC or aluminum sheet extrusion or post forming processing. However, fiber cement and wood panels are not formed using these processes. Rather, these panels are either sawed or formed in press operations that likely could not form overlapping, interlocking members such as shown in Hagopian and Dickey. Therefore, not only do Hagopian and Dickey not teach clapboard siding panels, there is no teaching or suggestion in either reference to modify the design of Hagopian into a clapboard siding panel and there is no reasonable expectation of success in such a combination.

For at least these reasons, it is submitted that Claim 27 is allowable over the art of record.

## D. Rejection under 35 U.S.C. §103

The Action rejects Claims 2, 3, 22 and 23 as being obvious from Hagopian in view of Dickey.

Claims 2 and 3 depend from Claim 1. It is submitted that Claims 2 and 3 are allowable for at least the reasons set forth above in connection with Claim 1.

Claims 22 and 23 depend from Claims 17. It is submitted that Claims 22 and 23 are allowable for at least the reasons set forth above in connect with Claim 17.

Claims 2 and 22 each recite that the siding panel is a clapboard siding panel. As explained above in connection with Claim 27, Dickey does not disclose a clapboard siding panel, and one of ordinary skill would not, and likely could not, modify the siding panel of Hagopian as

Docket No. D0932-00428 [VS-8855]

a clapboard siding panel. For at least these reasons, it is submitted that Claims 2 and 22 are independently allowable over the art of record. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

Claim 3 recites that the siding panel is a fiber cement or wood clapboard siding panel. Claim 23 recites that siding panels are fiber cement clapboard siding panels. As also explained above in connection with Claim 27, Dickey does not disclose a clapboard siding panel (fiber cement, wood or otherwise), and one of ordinary skill would not, and likely could not, modify the siding panel of Hagopian as a clapboard siding panel. For at least these reasons, it is submitted that Claims 3 and 23 are independently allowable over the art of record.

Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

The Action also rejects Claims 7 and 24 as being obvious from Hagopian. Claims 7 and 24 recite that a major portion of the rear face forms an angle with the vertical wall between about 1-10 degrees. The Examiner concludes that the selected angle would be an obvious matter of design choice to one of ordinary skill in the art. The Examiner then states that "perhaps a large angle would be used if there exists a need to expel water from the surface of the siding member." Applicant respectfully disagrees. First, Hagopian appears to disclose a major portion of the rear surface of panel 10 being at a fairly large angle with respect to the wall 30. This angle appears to be 30 degrees or more. This large angle is necessitated by the need to accommodate flange member 28 for interlocking with gripping member 18 of an overlapped siding panel. This is certainly not a concern with the claimed panels of Claim 1 and Claim 17. Further, it is submitted that "1-10 degrees" is not a "large angle" as shown in Hagopian and suggested by the Examiner in the purported suggestion/motivation identified by the Examiner. Rather, this angle is relatively small and recognizes that Applicant's top panel will rest on (not interlock with) the bottom panel in an installation. It is therefore more desirable to have a relatively small angle in order to provide this resting orientation and to facilitate the manufacturing of the panels.

Docket No. D0932-00428
[VS-8855]

For at least these reasons, it is submitted that Claims 7 and 24 are independently allowable over the art of record. Reconsideration and withdrawal of the rejection of these claims are respectfully requested.

Docket No. D0932-00428 [VS-8855]

## IV. Conclusion

In view of the foregoing remarks and amendments, Applicant submits that this application is in condition for allowance at an early date, which action is earnestly solicited.

The Commissioner for Patents is hereby authorized to charge any additional fees or credit any excess payment that may be associated with this communication to deposit account 04-1679.

Respectfully submitted,

Dated: 8-1-06

Joseph A. Powers, Reg. No.: 47,006

Anomey For Applicant

DUANE MORRIS LLP 30 South 17<sup>th</sup> Street Philadelphia, Pennsylvania 19103-4196 (215) 979-1842 (Telephone) (215) 979-1020 (Fax)

15